

KOMATSU®

D61EX-15E0 D61PX-15E0

HORSEPOWER

Gross: 127 kW 170 HP @ 1850 rpm

Net: 125 kW 168 HP @ 1850 rpm

OPERATING WEIGHT

D61EX-15E0 16710 kg 36,840 lb

D61PX-15E0 18710 kg 41,250 lb

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CRAWLER DOZER



Photo may include optional equipment.

WALK-AROUND

Komatsu-integrated design for the best value, reliability, and versatility. Hydraulics, power train, frame, and all other major components are engineered by Komatsu. You get a machine whose components are designed to work together for higher production, greater reliability, and more versatility.

Hydraulic driven radiator cooling fan controlled automatically, reduces fuel consumption and operating noise levels. See page 8.

SAA6D107E-1 turbocharged after-cooled diesel engine provides an output of **125 kW** 168 HP with excellent productivity, and is EPA Tier 3 and EU Stage 3A emission certified. See page 6.

Gull-wing engine side doors for easy servicing. See page 8.

High capacity **Power angle tilt dozer**, Semi-U Tilt dozer (for D61EX), combines the highest power in its class with outstanding productivity.

Blade tilt lines completely protected.

Komatsu torqflow transmission offers single lever control of speed (3 forward and 3 reverse) and directional changes.

Forward mounted **pivot shafts** isolate final drives from blade loads.



Electronic monitoring system prevents minor problems from developing into major ones.

New hexagonal designed cab includes:

- Spacious interior
- Comfortable ride with new cab damper system.
- Excellent visibility
- High capacity air conditioning system (optional)
- Palm Command Control System (PCCS) levers
- Optional pressurized cab
- Adjustable armrests

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BLADE CAPACITY

PAT Dozer:
D61EX-15E0: 3.4 m³ 4.4 yd³
D61PX-15E0: 3.8 m³ 5.0 yd³
Semi-U Tilt Dozer:
D61EX-15E0: 4.3 m³ 5.6 yd³



Wet, multiple-disc brakes

eliminate brake-disc adjustments for maintenance-free operation. See page 8.

Hydrostatic Steering System (HSS)

provides smooth, quick, and powerful control in various ground conditions. See page 5.

Bolt-on segmented sprocket teeth

for easy in-the-field replacement.

Modular power train for increased serviceability and durability. See page 8.

Photo may include optional equipment.

PALM COMMAND CONTROL SYSTEM (PCCS)

Komatsu's ergonomically designed control system "PCCS" creates an operating environment with "complete operator control."

Human-machine interface

Palm command electronic controlled travel control joystick

Palm command travel joystick provides the operator with a relaxed posture and superb fine control without operator fatigue. Transmission gear shifting is simplified with thumb push buttons.



Full-adjustable suspension seat and travel control console

The travel control console has adjustment fore and aft, and height.

For improved rear visibility during reverse operations, the operator can adjust seat 15° to the right. (optional)

Palm command PPC controlled blade control joystick

Blade control joystick uses the Proportional Pressure Control (PPC) valve and joystick is similar to the travel control joystick. PPC control combined with the highly reliable Komatsu hydraulic system enables superb fine control.

Blade control joystick



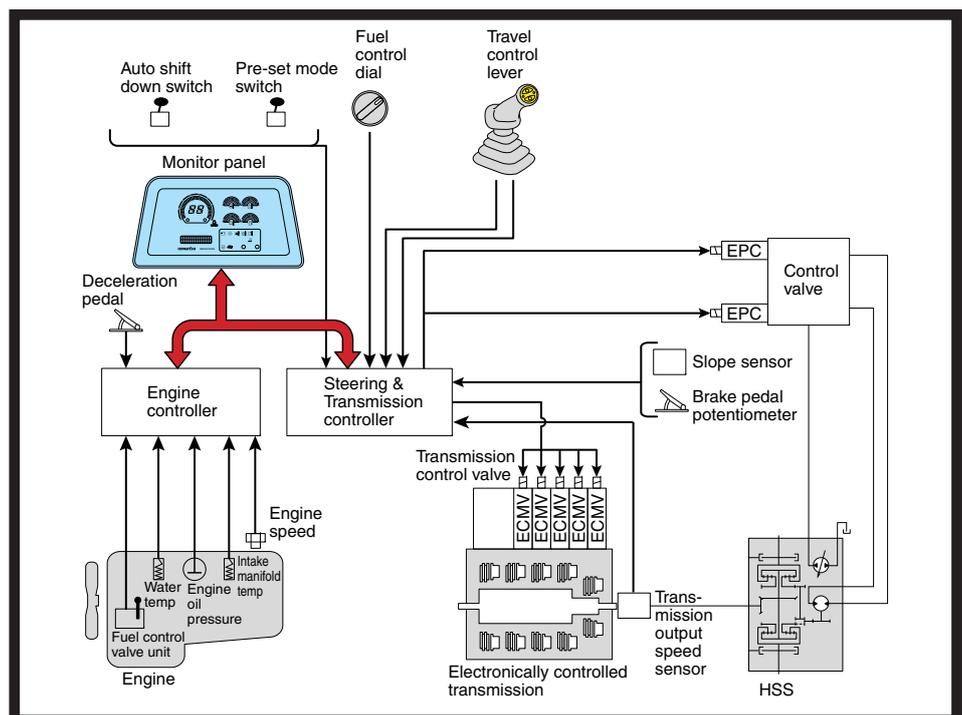
Fuel control dial

Engine revolution is controlled by electric signal, providing ease of operation, eliminating maintenance of linkage and joints.

Height adjustable armrest

Armrest height is adjustable without any tools, providing the operator with firm arm support in an ideal armrest.

Outline of electronic control system



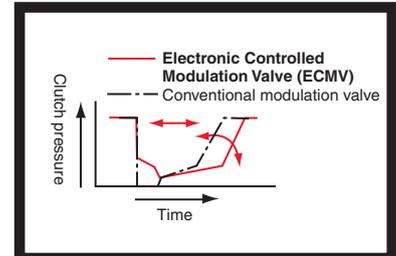
Power train electronic control system

Smooth and soft operation

D61EX/PX utilizes a newly designed power train electronic control system. The controller registers the amount of operator control (movements of lever and operation of switches) along with machine condition signals from each sensor, to calculate accurately the control of the transmission for optimal machine operation. The ease of operation and productivity of the new D61EX/PX is greatly improved through these new features.

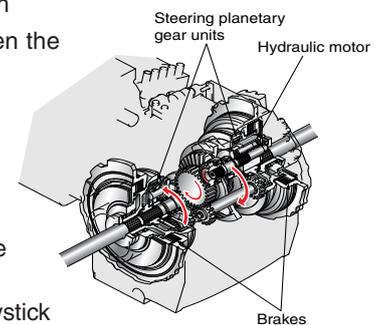
Electronic Controlled Modulation Valve (ECMV) controlled transmission

Controller automatically adjusts each clutch engagement depending on travel conditions such as gear speed, revolution and shifting pattern. This provides smooth shockless clutch engagement, improved component reliability, improved component life and operator ride comfort.



Hydrostatic Steering System—smooth, powerful turning

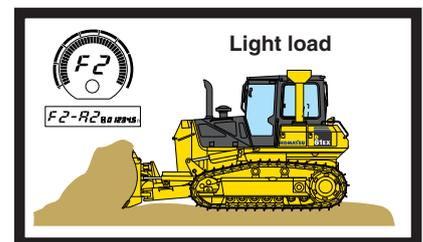
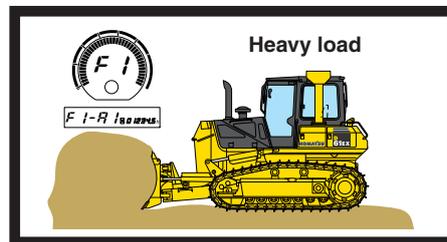
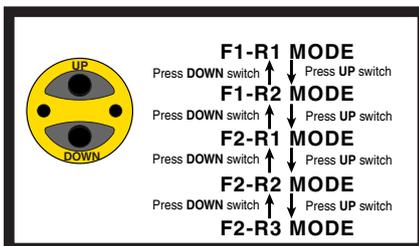
The Hydrostatic Steering System (HSS) is powered by an independent hydraulic pump with engine power transmitted to both tracks without power interruption on the inside track. When the machine turns, the outside track moves faster and the inside slower, for smooth, powerful turns. Counter-rotation is available for minimum turning radius providing excellent maneuverability. Shock-free steering reduces machine vibration and minimizes operator fatigue.



- Turning while dozing— the machine turns by driving the left and right tracks under power at different speeds allowing the machine to travel at the same speed as in straight dozing.
- Side cutting— when side-loading the blade, straight travel can be maintained utilizing HSS.
- On downhill slopes— the machine doesn't require counter-steering. The joystick provides the same steering response on downhill slopes as on flat ground.
- Grading— can be done efficiently without damaging the ground, because the inside track is not locked during turning.

Preset travel speed function

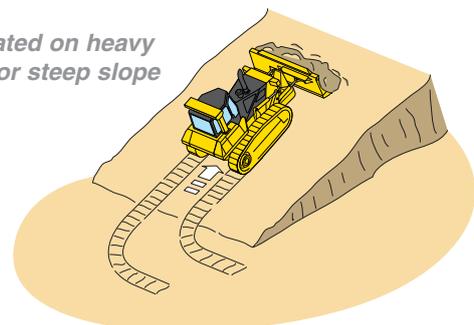
Preset travel speed selection function is provided as standard equipment. The preset switch enables the operator to select a combination of forward/reverse gear shifts, from 5 patterns; F1-R1, F1-R2, F2-R1, F2-R2 and F2-R3, by using UP/DOWN shift switch, and once the shift pattern is selected, only forward / reverse direction control selection is required. Once F2-R2 pattern is selected, for example, 2nd gear is automatically selected when travel control joystick is moved into forward/reverse. This function reduces gear shifting frequency during machine operation, and is especially helpful, when used in combination with auto-downshift function.



Auto-downshift function

Controller monitors engine speed, travel gear and travel speed. When load is applied and machine travel speed is reduced, the controller automatically downshifts to optimize gear speed to provide high fuel efficiency. This function provides comfortable operation and high productivity without manual downshifting. (This function can be deactivated with cancel switch.)

Actuated on heavy load or steep slope



PRODUCTIVITY FEATURES



Engine

The Komatsu SAA6D107E-1 engine delivers **125 kW** 168 HP at 1850 rpm. The fuel-efficient Komatsu engine, together with the heavy machine weight, make the D61EX/PX superior crawler dozers in both ripping and dozing operations. The engine is EPA Tier 3 and EU Stage 3A emissions certified, and features direct fuel injection, turbocharger, air-to-air and aftercooler to maximize fuel efficiency. To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions.

Hydraulic drive radiator cooling fan

Fan rotation is automatically controlled depending on coolant and hydraulic oil temperature, saving fuel consumption and providing great productivity with a quiet operating environment.

Work equipment

Large blade

Capacities of **3.4 m³** 4.4 yd³ (PAT dozer for D61EX), **3.8 m³** 5.0 yd³ (PAT dozer for D61PX), **4.3 m³** 5.6 yd³ (Semi-U dozer for D61EX) yield outstanding production. High-tensile-strength steel has been incorporated into the front and sides of the blade for increased durability.

Undercarriage

Low drive and long track undercarriage

Komatsu's design is extraordinarily tough and offers excellent grading ability and stability.

The track seal life is increased by using large-size bulldozer type seals.



Photo may include optional equipment.

WORKING ENVIRONMENT

Operator comfort

Operator comfort is essential for productive work. The D61EX/PX provides a quiet, comfortable environment where the operator can concentrate on the work at hand.

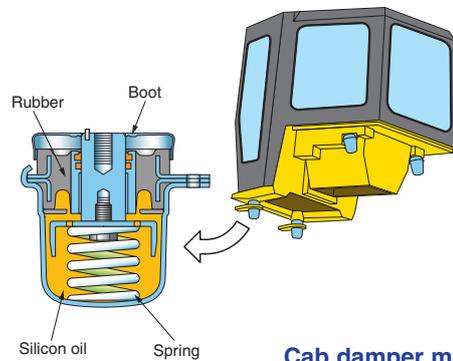


Hexagonal pressurized cab

- The cab's new hexagonal design and large tinted glass windows provide excellent front, side, and rear visibility.
- Air filters and a higher internal air pressure combine to prevent dust from entering the cab.

Comfortable ride with new cab damper mounting

D61EX/PX's cab mount uses a new cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts soften shocks and vibration while traveling over adverse conditions, which conventional mounting systems are unable to absorb. The cab damper spring isolates the cab from machine chassis, suppressing vibration and providing a quiet, comfortable operating environment.



Cab damper mounting

New suspension seat (optional)

A newly designed suspension seat is available. Fore and aft sliding rails and suspension spring have been newly designed to increase strength and rigidity. The new seat provides excellent support, improving riding comfort. Fore and aft seat travel is designed for almost all operator sizes. An optional air suspension seat for increased riding comfort is also available. It has an automatic operator weight adjustment system and an air lumbar support to improve operator comfort.



Photo may include optional equipment

EASY MAINTENANCE

Preventative maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D61EX/PX with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Centralized service station

To assure convenient maintenance, the transmission and HSS oil filters, power train oil level gauge and hydraulic tank are arranged on the right side of the machine.



Monitor with self-diagnostic function

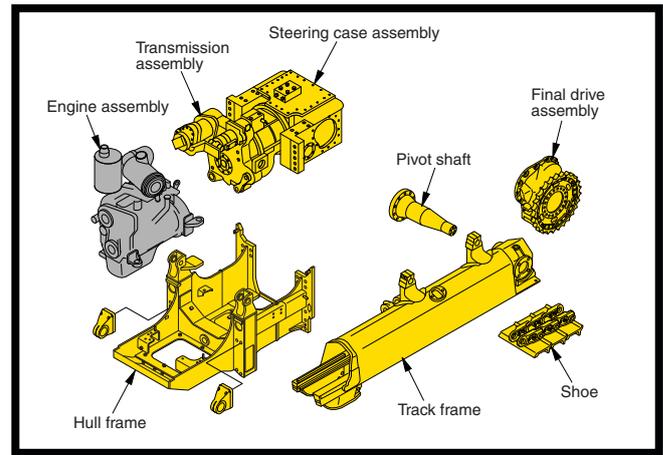
With the starting switch turned ON, the monitor displays check-before-starting and caution items appear on the lower right part of the panel. If the monitor detects abnormalities, corresponding warning lamp blinks and warning buzzer sounds. The monitor displays engine rpm and forward/reverse gear speed on the upper part of the monitor during operation. If abnormalities occur during operation, user code appears on display. When a critical user code is displayed, the caution lamp blinks and a warning buzzer sounds to prevent the development of serious problems.

Easy/cleaning with hydraulic driven radiator cooling fan

The radiator core and the core on the front side of the oil cooler can be easily cleaned by running the hydraulic engine fan in reverse. Accordingly, the cleaning intervals of those cores can be increased.

Modular power train design

Power train components are sealed in a modular design that allows the components to be dismantled and mounted without oil spillage.



Reliable simple structure

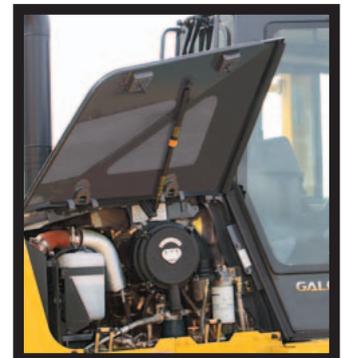
Simple hull structure main frame design increases durability and reduces stress concentration at critical areas. The track frame has a large cross section and utilizes pivot shaft mounting for greater reliability.

Maintenance-free disc brakes

Wet disc brakes require less maintenance.

Gull-wing engine side covers

The opening area is further enlarged when gull-wing engine side covers are opened, facilitating engine maintenance and filter replacement.



CLEAN AND SILENT DESIGN

Clean engine

The SAA6D107E-1 engine is EPA Tier 3 and EU Stage 3A emissions certified. It develops low emission of NOx, hydrocarbon, and particle matter, without sacrificing power or machine productivity.

Quiet design

Rubber mounted noiseless engine and hydraulically driven fan provide a low noise operation.

Use of recyclable parts

Recyclable parts are used to minimize the effects on the environment.

Extended service interval

Long-life consumable parts such as filters and elements are used to lengthen their replacement interval to lower the maintenance cost.



Photo may include optional equipment.

SPECIFICATIONS



ENGINE

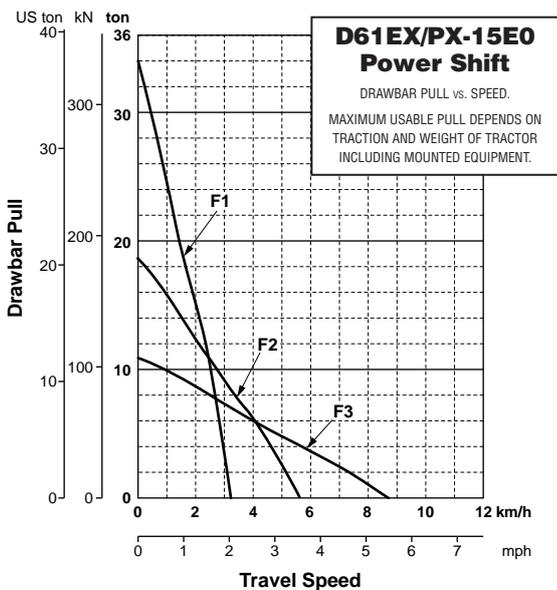
Model Komatsu SAA6D107E-1
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged, air-to-air aftercooled
 Number of cylinders 6
 Bore x stroke **107 mm x 124 mm** 4.21" x 4.88"
 Piston displacement **6.69 ltr** 408 in³
 Governor All-speed, electronic
 Horsepower
 SAE J1349 Gross **127 kW** 170 HP
 ISO 9249* Net **125 kW** 168 HP
 Rated rpm 1850 rpm
 Fan drive type Hydraulic
 Lubrication system
 Method Gear pump, force lubrication
 Filter Full-flow
 *Net horsepower at the maximum speed of
 radiator cooling fan **116 kW** 155 HP
 EPA Tier 3 and EU Stage 3A emissions certified.



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase, torque converter and a planetary gear, multiple-disc clutch transmission which is hydraulically-actuated and force-lubricated for optimum heat dissipation.

Travel speed	Forward	Reverse
1st	0-3.2 km/h 0-2.0 mph	0-4.3 km/h 0-2.7 mph
2nd	0-5.6 km/h 0-3.5 mph	0-7.2 km/h 0-4.5 mph
3rd	0-8.7 km/h 0-5.4 mph	0-11.0 km/h 0-6.8 mph



FINAL DRIVE

Spur gear double-reduction, final drives increase tractive effort. Segmented sprocket are bolt-on for easy in-the-field replacement.



STEERING SYSTEM

PCCS lever controls for all directional movements. Pushing the PCCS lever forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the PCCS lever to left to make a left turn.
 Hydrostatic Steering System (HSS) is powered by steering planetary units and an independent hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.
 Minimum turning radius:
 D61EX-15E0 **1.8 m** 5'11"
 D61PX-15E0 **2.2 m** 7'3"
 As measured by track marks on ground.



UNDERCARRIAGE

Suspension Oscillation with equalizer bar and forward mounted pivot shafts
 Track roller frame Monocoque, large section, durable construction
 Number of carrier rollers (each side) 2
 Track shoes Lubricated tracks. Unique dust seals for preventing entry of foreign abrasives into pin-to-bushing clearances for extended service.
 Track tension is easily adjusted with a grease gun.

	D61EX-15E0	D61PX-15E0
Number of track rollers (each side)	7	8
Type of shoes (standard)	single grouser	single grouser
Number of shoes (each side)	40	46
Grouser height	57.5 mm 2.3"	57.5 mm 2.3"
Shoe width (standard)	600 mm 24"	860 mm 34"
Ground contact area	31200 cm² 4,836 in ²	54520 cm² 8,451 in ²
Ground pressure (with dozer, ROPS canopy)	53.0 kPa 0.54 kgf/cm² 7.68 psi	33.3 kPa 0.34 kgf/cm² 4.83 psi
Track gauge	1900 mm 6'3"	2140 mm 7'0"
Length of track on ground	2600 mm 8'6"	3170 mm 10'5"



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Coolant **32 ltr** 8.5 U.S. gal
 Fuel tank **390 ltr** 103.0 U.S. gal
 Engine oil **29 ltr** 7.7 U.S. gal
 Damper **1.1 ltr** 0.3 U.S. gal
 Transmission, bevel gear, and steering system **69 ltr** 18.2 U.S. gal
 Final drive (each side) **28.5 ltr** 7.5 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

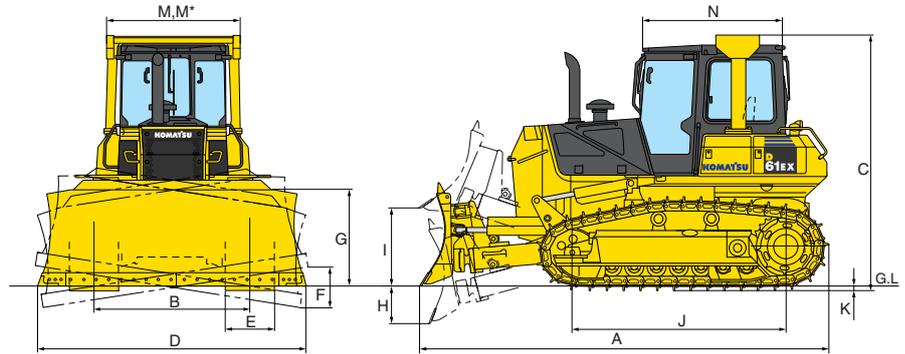
Tractor weight:
 Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment.
 D61EX-15E0 **13920 kg** 30,690 lb
 D61PX-15E0 **15620 kg** 34,440 lb
Operating weight:
 Including power angle tilt dozer, ROPS canopy, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.
 D61EX-15E0 **16710 kg** 36,840 lb
 D61PX-15E0 **18710 kg** 41,250 lb



DIMENSIONS

	D61EX-15E0		D61PX-15E0	
A	5030 mm	16'6"	5440 mm	17'10"
B	1900 mm	6'3"	2140 mm	7'0"
C	3150 mm	10'4"	3150 mm	10'4"
D	3275 mm	10'9"	3860 mm	12'8"
E	600 mm	24"	860 mm	34"
F	510 mm	1'8"	600 mm	2'0"
G	1200 mm	3'11"	1160 mm	3'10"
H	465 mm	1'6"	580 mm	1'11"
I	980 mm	3'3"	1025 mm	3'4"
J	2600 mm	8'6"	3170 mm	10'5"
K	57.5 mm	2.3"	57.5 mm	2.3"
M	1650 mm	5'5"	1650 mm	5'5"
M*	1825 mm	6'0"	1825 mm	6'0"
N	1630 mm	5'4"	1630 mm	5'4"

*ROPS canopy



Ground clearance 395 mm 1'4"



HYDRAULIC SYSTEM

Closed-center Load Sensing System (CLSS) designed for precise and responsive control and for efficient simultaneous operation.

Hydraulic control unit:

All spool control valves externally mounted beside the hydraulic tank. Plunger-type hydraulic pump with capacity (discharge flow) of **195 ltr/min** 51.5 U.S. gal/min at rated engine rpm.

Relief valve setting. 20.6MPa **210 kg/cm²** 2,990 psi

Hydraulic cylinders Double-acting, piston

	Number of cylinders	Bore	
Blade lift	2	110 mm	4.33"
Blade tilt	1	130 mm	5.12"
Blade angle	2	110 mm	4.33"

Hydraulic oil capacity (refilling):

Power angle tilt dozer **55.0 ltr** 14.5 U.S. gal

Control valves:

Spool control valve for power angle tilt dozer.

Positions:

- Blade lift Raise, hold, lower, and float
- Blade tilt Right, hold, and left
- Blade angle Right, hold, and left

Spool control valve for semi-U and straight tilt dozer.

Positions:

- Blade lift Raise, hold, lower, and float
- Blade tilt Right, hold, and left



DOZER EQUIPMENT

Use of high tensile strength steel in moldboard for strengthened blade construction.

	Overall Length With Dozer	Blade Capacity	Blade Width x Height	Maximum Lift Above Ground	Maximum Drop Below Ground	Maximum Tilt Adjustment	Additional Weight
D61EX-15E0 Power Angle Tilt Dozer	5030 mm 16'6"	3.4 m³ 4.4 yd ³	3275 mm x 1200 mm 10'9" x 3'11"	980 mm 3'3"	465 mm 1'6"	510 mm 1'8"	2400 kg 5,290 lb
D61EX-15E0 Semi-U Tilt Dozer	5050 mm 16'7"	4.3 m³ 5.6 yd ³	3175 mm x 1300 mm 10'5" x 4'3"	970 mm 3'2"	545 mm 1'9"	690 mm 2'3"	2430 kg 5,360 lb
D61PX-15E0 Power Angle Tilt Dozer	5440 mm 17'10"	3.8 m³ 5.0 yd ³	3860 mm x 1160 mm 12'8" x 3'10"	1025 mm 3'4"	580 mm 1'11"	600 mm 2'0"	2700 kg 5,950 lb



STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, **60 ampere**
- Backup alarm
- Batteries, **170 Ah/12V x 2**
- Decelerator pedal
- Electronic instrument monitor panel
- Engine hood and gull-wing side covers
- Fenders
- Floor mat
- Front pull hook
- High mount footrests
- HSS hydrostatic steering system
- Hydraulic drive radiator cooling fan with clean mode
- Hydraulics for Power Angle Tilt dozer
- Lighting system, (includes 2 front, 1 rear)
- Locks, filler caps and covers
- Muffler with curved exhaust pipe
- Palm Command Control System (PCCS)
- Radiator reserve tank
- Rain Cap (Intake air)
- Rear cover
- Rear view mirror
- ROPS mounting brackets
- Starting motor, **5.5 kW/24V**
- Suspension seat, reclining with vinyl material
- Track roller guard, center section (EX long track, PX)
- Track roller guard, end sections
- Trackshoe assembly:
 - Sealed and lubricated track
 - **600 mm 24"** single grouser shoe (EX)
 - **860 mm 34"** single grouser shoe (PX)
- Underguards, engine and transmission
- Water separator

ROPS CANOPY (without cab)

- Meets ISO 3471, SAE J/ISO 3471 ROPS standards, and ISO 3449 FOPS standard.
- Roof dimensions:
 - Length: **1830 mm 6'0"**
 - Width: **1825 mm 6'0"**
 - Height from operator compartment floor: **1670 mm 5'6"**



OPTIONAL EQUIPMENT

- Cab
 - Cab accessories:
 - Cup holder
 - Lunch box holder
 - 12V Power supply
 - Sun Visor
 - AM/FM Radio with cassette
 - Air conditioner
 - Heater and defroster
 - Suspension seat, reclining with fabric material (cab only)
 - Suspension seat, with high back
 - Seat, air suspension with high back (cab only)
 - Seat belt, retractable
 - Hitch, deluxe
 - Intake pipe with precleaner
 - Hydraulics for ripper (EX)
 - Long track arrangement (EX)
 - ROPS canopy
 - ROPS for cab
 - ROPS canopy with sweep
 - Light, working, cab additional
 - Light, rear working (ROPS canopy, additional)
 - Track guard, full length
 - AR track assembly (abrasion resistant bushings)
 - Underguard, heavy-duty
 - Vandalism protection cover for instrument panel
- CAB**
- Additional weight **490 kg 1080 lb**
 - All-weather, enclosed pressurized cab Meets ISO3449 FOPS Standard.
 - Dimensions:
 - Length: **1760 mm 5'9"**
 - Width: **1325 mm 4'4"**
 - Height: **1595 mm 5'3"**
 - Height from floor to ceiling: **1545 mm 5'1"**
- ROPS FOR CAB**
- Additional weight **240 kg 530 lb**
 - Meets ISO 3471, SAE J/ISO 3471 ROPS standards.
 - Dimensions:
 - Length: **530 mm 1'9"**
 - Width: **1650 mm 5'5"**
- MULTI-SHANK RIPPER (EX)**
- Additional weight (including hydraulic control unit): **1645 kg 3,630 lb**
 - Beam length: **2170 mm 7'1"**
 - Maximum digging depth: **665 mm 2'2"**
 - Maximum lift above ground: **565 mm 1'10"**

SHOES

Models	Shoe	Additional weight	Ground contact area	Additional ground pressure to tractor
D61PX	860 mm 34" circular-arc shoe	-400 kg -880 lb	54520 cm² 8,451 in ²	-1.0 kPa -0.01 kg/cm² -0.14 psi

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